PB-216 446

CHEHALIS RIVER BASIN (WASHINGTON). PRELIMINARY ECONOMIC RECONNAISSANCE AND ESTIMATE OF GROWTH, 1960-2010

Public Health Service
Portland, Oregon

January 1962

DISTRIBUTED BY:

NTIS

National Technical Information Service
U. S. DEPARTMENT OF COMMERCE
5285 Port Royal Road, Springfield Va. 22151

REGIONAL INFORMATION OFFICE
PB 216 446

WORKING PAPER NO. 12

CHEHALIS RIVER BASIN (WASHINGTON)
PRELIMINARY ECONOMIC RECONNAISSANCE AND ESTIMATE OF GROWTH, 1960-2010

January, 1962

Reproduced by
NATIONAL TECHNICAL
INFORMATION SERVICE
U S Department of Commerce
Springfield VA 22151

Prepared by: Economic Studies Group
Water Supply and Pollution Control Program
Pacific Northwest

8

2/12

(Basin #12)

REGIONAL INFORMATION OFFICE

WORKING PAPER #12

CHEHALIS RIVER BASIN (WASHINGTON)
PRELIMINARY ECONOMIC RECONNAISSANCE AND ESTIMATE OF GROWTH, 1960-2010

I. Introduction.

A. Purpose of This Analysis.

B. Definition of Area.

C. Study Period.

D. Limitations of This Analysis.

II. Present Economy of the Basin.

A. Population.

B. Industrial Pattern.

III. Estimated Growth.

A. Possibilities for Growth.

B. Estimate of Future Growth.

Prepared by: Economic Studies Group
Water Supply and Pollution Control Program, Pacific Northwest
January, 1962

I

January 15, 1962

CHEHALIS RIVER BASIN (WASHINGTON)
PRELIMINARY ECONOMIC RECONNAISSANCE AND ESTIMATE OF GROWTH, 1960-2010

I. Introduction.

A. Purpose of This Analysis.

This analysis is intended to provide a preliminary estimate of the economic potentials and anticipated growth of the subject area.

B. Definition of the Area.

The Chehalis River Basin includes most of Grays Harbor County, the western halves of Lewis and Thurston Counties, and a small portion of Mason County.

C. Study Period.

The study period is the 50-year period ending 2010, with an interim point at 1980.

D. Limitations of This Analysis.

This analysis is intended only as an initial estimate of the outlook for growth in the subject area, based on broad trends. Subsequently, in connection with the preparation of the Columbia River Basin Project, additional and more detailed economic analysis will be considered. Such an analysis would include studies of growth potential on an industry-by-industry basis. At that time, this preliminary estimate will be reviewed and revised if necessary.

II. Present Economy of the Basin.

A. Population.

Estimated population of the Chehalis River Basin is shown in Table 1. There was little change in population during the 1950-60 decade. Small increases in some areas were offset by decreases in others. There appear to have been no areas of rapid population growth in the Basin during the 1950-60 period.

Table 1
ESTIMATED POPULATION IN THE CHEHALIS RIVER BASIN
(Population in thousands)

Area	1950	1960	1960 as % of 1950
Portion of Grays Harbor	51.3	51.6	101
Portion of Lewis County	30.2	29.1	96
Portion of Thurston County	6.2	6.5	105
Portion of Mason County	0.6	0.5	80
TOTAL, Chehalis River Basin	88.3	87.7	93

The thirteen principal urban communities in the Basin are listed in Table 2, with their population at the time of the 1950 and 1960 census. The four largest cities in the Basin had small declines in population during the decade. Some of the other communities had small increases in population, though it is not possible from available statistics to eliminate the effects of any annexations to cities that may have occurred during the decade. The thirteen urban communities listed in Table 2 constitute about 60 percent of total population in the Basin.

Table 2
POPULATION IN PRINCIPAL CITIES AND TOWNS IN THE CHEHALIS BASIN

Community	April 1, 1950	April 1, 1960	1960 as % of 1950
Aberdeen	19,653	18,741	95
Bucoda	473	390	82
Centralia	8,657	8,586	99
Chehalis	5,639	5,199	92
Cosmopolis	1,164	1,312	113
Elma	1,543	1,811	117
Hoquiam	11,123	10,762	97
Montesano	2,328	2,486	107
McCleary	1,175	1,115	95
Napavine	242	314	130
Oakville	372	377	101
Tenino	969	836	86
Westport	731	976	134
TOTAL, 13 communities	54,069	52,905	98

B. Industrial Pattern.

The economy of the Chehalis River Basin is heavily dependent on lumber and wood products manufacturing, which provided about 80 percent of all manufacturing employment in 1950. Employment in that industrial classification dropped to about 74 percent of all manufacturing jobs in 1960, due partly to the depressed condition of the lumber industry. The 1960 figure is based on data for employment covered by unemployment compensation only.

Table 3 shows total employment (based on U. S. Census data) in Grays Harbor and Lewis Counties in 1950. Employment data are not available for the portions of Mason and Thurston Counties which lie in the Chehalis River Basin. However, over 90 percent of Basin population is in Grays Harbor and Lewis Counties. In Table 3, the importance of lumber and wood products employment is readily apparent. Another important industry is pulp and paper, which represents the bulk of the employment in the "all other manufacturing" category. Over 90 percent of all manufacturing employment in the two-county area rests upon the timber resource.

Table 3
EMPLOYMENT, BY INDUSTRY, IN GRAYS HARBOR AND LEWIS COUNTIES, 1950
(Data for Employed Civilian Labor Force)

Total Population	97,399
Total Labor Force	35,027
Agriculture	3,617
Forestry and fisheries	625
Mining	114
Manufacturing, TOTAL	12,865
Lumber, wood products	10,314
Food and kindred	840
Pulp and paper	316
All other	1,395
Construction	1,747
All services	16,059

There is considerable employment in fishing in Grays Harbor, although total employment in the "forestry and fisheries" category was less than 2 percent of the total labor force at the time of the April, 1950 census. About 10 percent of the labor force was employed in agriculture.

Table 4 shows the relative specialization in the Chehalis River Basin economy by comparing the distribution of the labor force there with the distribution in the Seattle Region, of which it is a part. The table illustrates the Chehalis Basin's heavy concentration in timber-based industries and its dependence upon the Seattle Metropolitan Area for many services. While employment in agriculture is above the Seattle Region's average, it is below that in the Portland Region, which had 44.7 persons in agriculture per 1,000 population at the time of the 1950 census.

Table 4
EMPLOYMENT BY INDUSTRY PER 1,000 OF TOTAL POPULATION, 1950
(Total Employed Civilian Labor Force)

Industry	Chehalis Basin[1/]	Seattle Region
Total Labor Force per 1,000 population	359.6	351.4
Agriculture	37.1	27.9
Forestry and fisheries	6.4	3.4
Mining	1.2	1.6
Manufacturing, TOTAL	132.1	78.7
Lumber, wood products	105.9	25.8
Food and kindred	8.6	9.4
Printing, publishing	3.3	4.7
All other manufacturing[2/]	14.3	38.8
Construction	17.9	26.8
All Services[3/]	164.9	213.0

1/ Distribution based on figures for Grays Harbor and Lewis Counties.
2/ Includes pulp and paper.
3/ Includes "industry not reported" classification, representing less than 1 percent of labor force.

III. Estimated Growth.

A. Possibilities for Growth.

The economy of the Chehalis River Basin during the decade 1950-60 experienced no total growth. Not only the cities, as a group, but the area as a whole declined slightly in population during the

period. This occurred while the State of Washington was growing at a rate of 1.8 percent per year and the Puget Sound Area at a rate of 2.1 percent per year.

The outlook for the future of the Basin appears to be tied closely to the possibilities for maintaining or possibly increasing the timber harvest. A preliminary appraisal of the outlook for the timber resource suggests that the decreasing availability of old-growth timber will be offset by second-growth timber from tree farms so that total harvest may, over the long run, be maintained, or even increased slightly. However, any increase in total cut is likely to be paralleled by increasing productivity per worker, so that no increase in the labor force in lumber and wood products industries is foreseen.

A pulp mill existed in the lower Basin prior to 1950 and a another was established during the 1950-60 decade. It is likely that some expansion will take place in employment in this industry, which would mean an additional diversion of some of the timber resource from lumber and wood products uses to pulp and paper uses.

Some economic growth can also be built upon expansion of the tourist industry around Grays Harbor.

The cities of Centralia and Chehalis, in the upper Basin, have performed service and trade functions for the area around them. These cities declined in population during 1950-60 and one reason for that decline is probably the increasing ease and speed of transport to the Vancouver-Portland metropolitan area to the south and to Olympia and the Tacoma-Seattle metropolitan area to the north. While the central location of Chehalis and Centralia between these population centers to the north and south might attract some distributive industries, it seems likely that this tendency will be more than offset by population in the area going out to the larger cities for trade and service purposes.

B. Estimate of Future Growth.

Various projections for future population growth for the State of Washington and for the Puget Sound Basin have been made by State and Federal agencies. The "medium" or "most likely" forecasts anticipate a growth in the State and the Puget Sound Basin of about 2.0 percent per year during 1960-80 and about 1.7 percent for 1980-2010. It appears likely that the Chehalis River Basin will grow considerably less rapidly than those other areas. For purposes of this initial reconnaissance, it is assumed here that the population decline in the Chehalis River Basin can be reversed but that the

annual growth rate is unlikely to exceed half of the growth rates forecast for the State as a whole or for the Puget Sound Basin as a whole. If annual growth rates for the Chehalis River Basin of 1.0 percent during 1960-80 and 0.8 percent for 1980-2010 are assumed, population of the Basin would be as follows:

1960	1980	2010
87,700	107,000	136,000

Within the subject area the western part of the Chehalis River Basin is likely to attract more of the anticipated growth than the eastern part so that there will be a relative increase in the population of the lower Basin.

No attempt is being made at this time to forecast the growth outlook for individual cities. A rough guide to the cities' future population can be based on the assumption that their growth will parallel that forecast for the Basin as a whole, 1.0 percent per year during 1960-80 and 0.8 percent during 1980-2010.